

# IWT-5000A

## Impulse Winding Tester

### Introduction

IWT-5000A winding tester is a coil (such as voltage transformer, inductance, motor) testing instrument that tests self-insulating property of the coil. The influences of winding materials, magnetic materials, and framework, also extra fabrication decreases the insulating property of coil layers along with the jumpers and jacks. The IWT-5000A adopts the technology of high-speed sampling rate to store the sample waveform of the standard (master) coil in the instrument. By comparing the waveform results of the test coil to the master, the defect in the DUT can be found easily. Moreover, the IWT-5000A judges the quality of the testing coil according to the parameter set by the user.

### Features

- With 200V~5000V programmable impulse voltage, it is capable of low-energy testing, without damaging the coil.
- Provide high-speed sampling rate of 100MHz, which enhances the testing ability for partial discharges.
- 320 x 234 color LCD display clearly for the user to view waveform and test results.
- Provide user-friendly operation interface.
- Low inductance during impulse testing, minimum to 10 $\mu$ H.
- Provide 4 kinds of detection modes: AreaSize Comparison, DiffZone Comparison, Corona Amount Comparison, and Corona Number Comparison.
- The comparative result shows Pass/Fail directly, informing operators the detect test result within a short period of time.
- Offer measurement functions for voltages, timing and frequencies, which provide user a carry-out analysis in detail.
- Able to save 360 sets of standard waveform result of the coil for users to download and implement into testing.
- Provide RS-232 to PC connection. Just using standard text command, you can writing control program and data for communication easily. It's the best way to set up the testing system for mass production.



### Standard Accessories

- Main unit.....x1
- High voltage test line.....x1
- AC power cord.....x1
- USB cable.....x1
- RS-232 Cable.....x1
- CD.....x1  
(Driver and user manual are include)
- RS-232 to USB cable.....x1

### Specification

Testing Voltage	200V~5000V(100V Steps)
Output Energy	0.25J (Max)
Inductance Range Of Test Coil	10 $\mu$ H and above
Sampling Rate	8 bit /10ns (100MHz)
Sampling Memory Depth	5000 Byte
Input Resistance	10M $\Omega$
Display Measure	5.6 inch Colored LCD (320 x 234)
Comparison Measures	AreaSize Comparison, DiffZone Comparison, Corona Amount Comparison, Corona Number Comparison
Storage Waveforms	360 Sets of waveforms
Comparison Output	Pass/Fail, beeping
Communication	1. USB 2.0 2. RS-232 3. I/O
Power	110V/220V AC
Frequency Range	50/60Hz
Dimension	310 x 150 x 180mm
Weight	5.4Kg
Temperature	25 $^{\circ}$ C~40 $^{\circ}$ C

### PC System Requirement

Operating System	Windows 8 32/64bits, Windows 7 32/64bits, Windows VISTA 32/64bits, Windows XP 32/64bits
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- To make analysis easier, IWT-5000A offers USB 2.0 interface to connect with PC for users to upload or download the parameters of waveforms results.
- Provide the control function for external I/O, such as the Handler adopts standard D SUB 15-pin connector for connecting with automatic or semi-auto testing system.
- Provide self-calibration function. No need to send back for the vendor's calibration. Saving time and cost.
- Provide the convert software for Excel.